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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,554

09/05/2006

Erwin Rinaldo Meinders

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

LEE, NICHOLAS J

ART UNIT

PAPER NUMBER

4134

MAIL DATE

DELIVERY MODE

01/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,554	Applicant(s) MEINDERS ET AL.	
	Examiner NICHOLAS LEE	Art Unit 4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/5/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: In ¶ 0046, the applicant discloses "705" which seems to be a misspelling of 70%. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Pub. 2003/0067863 A1 to Takeda et al ("Takeda").

As to claim 1, Takeda discloses an optical disc device (Fig. 4) comprising a ultraviolet laser light having a wavelength of 266 nm (¶ 0059, 0084) and an objective lens (37) (¶ 0009) with a numerical aperture NA of .9 for focusing (¶ 0085). Takeda further discloses an optical record carrier (38) characterized by a spiral track with a track pitch between 150 nm to 450 nm (¶ 0085). It would be obvious to have the range of track pitch between $.55 * \lambda / NA$ and $.75 * \lambda / NA$ since Takeda teaches a wavelength(266nm) (see ¶ 0059, 0084), numerical aperture(0.9)(see ¶ 0085) ; and $.55 * 266 / 0.9 = 162 \text{nm}$ and $.75 * 266 / .9 = 221 \text{nm}$ which falls in the range of 150 nm to 450 nm disclosed by Takeda(¶ 0085).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Pub. 2003/0067863 A1 to Takeda et al ("Takeda ") and further in view of US Patent No. 5,920,540 to Satoh ("Satoh").

As to claim 2, see the discussion of Takeda above. Takeda fails to disclose an optical disc device comprising an optical record carrier characterized by a groove depth d , wherein said groove depth is within a given range with respect to a refractive index of a cover layer.

Satoh discloses an optical disk comprising groove depths is defined by $\lambda/(8n)$, where n represents the refractive index of the substrate or cover layer (col. 9, lines 63-67). This formula for calculating the groove depth falls within the ranged disclosed by the applicant in claim 2.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have modified Takeda with the teachings of Satoh to avoid any jitter of a signal and thereby suppressing reading errors (Satoh, ¶0011).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Pub. 2003/0067863 A1 to Takeda et al ("Takeda ") in view of US Patent No. 5,547,727 to Shuttleworth et al ("Shuttleworth").

As to claim 3, Takeda fails to disclose an optical record carrier characterized by a groove duty cycle between 30% and 70%.

Shuttleworth discloses an optical recording element comprising a record pattern of grooves and lands at 50% duty cycle (col. 12, lines 22-24).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have modified Takeda with the teachings of Shuttleworth to avoid any jitter of a signal and thereby suppressing reading errors.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS LEE whose telephone number is (571)270-7354. The examiner can normally be reached on Monday-Friday 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lun-Yi Lao can be reached on 571-272-7671. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/NICHOLAS LEE/
Examiner, Art Unit 4134

/LUN-YI LAO/
Supervisory Patent Examiner, Art Unit 4134